DOCUMENT RESUME

ED 225 475 HE 015 835

AUTHOR Kayla, Carol A.; And Others
TITLE Impact of the Older Student on Undergraduate Enrollment. SAIR Conference Paper.
PUB DATE Oct 82
NOTE 36p.; Paper presented at the Annual Conference of the Southern Association for Institutional Research (Birmingham, AL, October 28-29, 1982).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Persistence; *Adult Students; *Age Groups; Degrees (Academic); Full Time Students; Higher Education; Institutional Research; Longitudinal Studies; *Nontraditional Students; Part Time Students; School Holding Power; Sex Differences; Student Attrition; Trend Analysis; *Undergraduate Students
IDENTIFIERS *SAIR Conference; *West Virginia University

ABSTRACT

Enrollment and retention trends during 1977-1981 for undergraduate nontraditional (age 25 and older) students at West Virginia University (WVU) were studied. During the 5-year period, the number of nontraditional undergraduates increased over 23 percent, while total undergraduate enrollment remained relatively stable. Nationally, females represent the majority of adult students, but there was a slight majority of males at WVU. However, the number of older female students increased dramatically since 1977. Although nationally about 72 percent of the students 25 years old and older are part-time, the majority of WVU nontraditional students have been full-time and over 70 percent have been enrolled in degree programs as opposed to specialized majors. Retention of nontraditional freshmen was slightly over 50 percent after 1 year and 35 percent after 2 years. Retention rates were slightly higher for sophomores and juniors. The graduation rate in 4 years was low for nontraditional students; however, it appears that about 50-76 percent of sophomores, juniors, and seniors graduate by 5-6 years after entry. It is concluded that the majority of adult students are degree-oriented. (SW)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED225475

# IMPACT OF THE OLDER STUDENT ON UNDERGRADUATE ENROLLMENT

Carol A. Kayla
Peggy S. Yi
Richard D. Howard
Office of Institutional Research
West Virginia University
Morgantown, WV 26506

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

SAIR

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

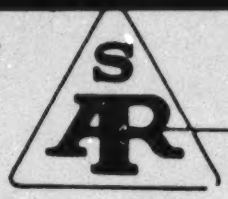
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Presented at the Southern Association for Institutional Research Conference
Birmingham, Alabama, 1982

NOTE: NOT ALL DATA TABLES ARE PRESENTED IN THIS DISTRIBUTION COPY BUT ARE AVAILABLE UPON REQUEST FROM THE AUTHORS.

HE 015 835




SOUTHERN ASSOCIATION FOR INSTITUTIONAL RESEARCH

This paper was presented at the 1982 Annual Conference of the Southern Association for Institutional Research held in Birmingham, Alabama, October 1982. It was reviewed by the SAIR Publications Committee and was judged to be of high quality and of interest to others concerned with the research in higher education. This paper has therefore been selected to be included in the ERIC collection of Conference Papers.

Gerald W. McLaughlin
President, SAIR

**West Virginia University**

**Office of Institutional Research**

Purinton House
Morgantown, WV 26506 304 293-4906

# IMPACT OF THE OLDER STUDENT ON UNDERGRADUATE ENROLLMENT

Carol A. Kayla
Peggy S. Yi
Richard D. Howard
Office of Institutional Research
West Virginia University
Morgantown, WV 26506

Presented at the Southern Association for Institutional Research Conference
Birmingham, Alabama, 1982

NOTE: NOT ALL DATA TABLES ARE PRESENTED IN THIS DISTRIBUTION COPY BUT ARE AVAILABLE UPON REQUEST FROM THE AUTHORS.

ABSTRACT

College and university enrollment patterns appear to be in a state of transition as the number of traditional aged (18-22 year olds) students is shrinking; while the number of people age 25 and above is increasing. (Margarrell, 1981) Regardless of whether or not institutions actively recruit these adults as students to supplement any loss in enrollment it is evident that the number of adults age 25 and over enrolling in higher education is increasing. According to the U.S. Census Bureau "more than a third of all college students now are 25 or older." (Magarrell, 1981, p. 3)

If this trend continues, information on changing student characteristics and the retention/attrition patterns of this new type of student will be vital to planning and policy development at all institutions. The circumstances at each institution will dictate where, when and how the institution must adapt to serve the needs of the adult students.

In this paper a study conducted at one institution on the five-year trends of enrollment of non-traditional (age 25 and older) undergraduate students and their retention/attrition patterns is reported. In the five years studied the number of non-traditional undergraduates increased over 23%; while total undergraduate enrollment remained relatively stable. Although nationally, females represent the majority of adult students, at the institution studied males still hold the slight majority. However, the number of older female students has increased dramatically from 1977. Although nationally about 72% of the students age 25 and over are part-time; over the last five years the majority of non-traditional students in this study have been full-time and over 70% were enrolled in degree programs as opposed to specialized majors.

The results of the retention study showed that only a little over half of the non-traditional freshmen were retained after one year and this declined to 35% after two years. The retention rates were slightly higher for the sophomores and juniors.

The rate of graduation in four years was low for non-traditional students; however, it does appear that a fairly high percentage (50-76%) of sophomores, juniors and seniors have graduated by what looks like five or six years after entry. These rates show that the majority of adult students at the institution in this study are committed to obtaining a degree and are not just taking leisure classes.

It is fairly evident that the participation of adult students has made a significant impact on undergraduate enrollment as the majority are not transient students, but are full-time participants paying full tuition and fees. Therefore, the institution should be sure that the needs of these new students are identified and begin to develop strategies to meet them.

## INTRODUCTION

Over the past few decades, college and university enrollment patterns have been changing. In the past, students were primarily young, single, unemployed and full-time students. Recently the number of adults 25 years and older have made up an increasingly larger percentage of college and university enrollment. Higher education appears to be in a state of transition as the pool of traditional age college students (18-22 year olds) is shrinking; while the number of people age 25 and above is increasing. (Magarrell, 1981)

Large declines in the projected number of 18-22 year olds in the 1980's lead to a prediction of sharp declines in enrollments at higher education institutions. So far this decline has not materialized to the degree predicted. It is assumed now that the decline in students will not be as great as predicted, partly due to the increasing enrollment of students for non-degree credit and to a lesser extent the increasing participation rate of adults attending college. (Magarrell, 1978)

Some institutions, however will be greatly effected by the decline of the younger students and will need to look for new constituencies. Many will try to attract a larger number of older students to offset any declines in enrollment. In order to attract the older students, institutions must first have knowledge of the characteristics of those currently enrolled and change their retention and recruitment plans to meet the older students' needs. (Kuh and Ardaiolo, 1979)

It appears that, regardless of whether or not institutions actively recruit the adult learners to supplement enrollment, the number of adults age 25 and over enrolled in colleges and universities is increasing. The major missions of higher education have always been specified as teaching, research and public service. Educational institutions must meet the challenge to be relevant to the "current needs, to contribute to the community and to adapt to

changing student hopes" as more older people in the public show an interest in education. (Edna McConnell Clark Foundation, 1974, p. 66) Therefore, if higher education is going to best serve the needs of this part of society in the future, institutions must be aware of these new types of students, their characteristics, needs and their retention/attrition patterns. The local circumstances of each institution will then dictate where and when the institution must adapt to meet the needs of the older students.

In this paper a study conducted at one institution on the five-year trends of enrollment of non-traditional (age 25 and older) undergraduate students and their retention/attrition patterns is reported. The purpose of the study was to provide data concerning the impact of the older student on undergraduate enrollment to the central administration, student services, and the campus organization Older Adult Student Information Service (OASIS).

## LITERATURE REVIEW

In general, adult education includes adults participating in any kind of educational activity, not necessarily formal education at colleges and universities. Many studies have been conducted concerning adult education in general, Carp, Peterson, and Roelfs, 1974; Froomkin and Wolfson, 1977; and Johnstone and Rivera, 1965. However, less attention has been focused on the adults attending college and universities where according to Anderson, 1977, "the most dramatic increase in the enrollment of adults has been at colleges and universities." (Anderson and Darkenwald, 1979, p. 358)

According to the U.S. Bureau of the Census "more than a third of all college students now are 25 or older." (Magarrell, 1981, p. 3) Enrollment of these older adults showed a more rapid increase than the enrollment of those under 25 in the five-year period, 1974-1979. The number of students over age

25 rose 26%; while the number of students under 25 only increased 10%. (Magarrell, 1981)

The statistics are even more dramatic if you look at students over age 22. "According to Lenz and Schaevits, 1977, adult students (those beyond 18-22 year age range) comprise the fastest-growing segment, 48%, of the total enrollment in higher education." (Rawlins and Davies, 1981, p. 12)

As most higher education institutions are geared to the younger students, researchers feel the influx of these non-traditional adult students will have a significant impact on higher education. (Rawlins and Davies, 1981)

Factors for Adult Participation in Higher Education

There are mary reasons found to help explain the increasing interest and participation of adults in higher education and why adults will probably continue to participate in higher education. One reason for the increase is, of course, that there are more adults around because of past birth rates. The adults now who are interested in education are part of the post World War II baby boom that caused college enrollments in the 1960's to be so large. (Magarrell, 1978)

Another reason for the greater number of adults is that a larger proportion are living past middle age due to modern medical advances. (Peterson, 1979) In 1900 about one of every 25 Americans was over age 65, compared to 1974 when the ratio was one in every ten. It is estimated that by the year 2,000 the older Americans will represent a more significant part of the population as one in nine people will be over age 65. (Edna McConnell Clark Foundation, 1974)

Due to technological changes many jobs have become obsolete and workers need to be retrained or upgraded for other jobs. (Peterson, 1979) These rapid changes will probably force the average employee into three career changes during their lifetime. (McCants, 1981) Continued education will be needed by adults to

make effective transitions.

Just as the technological changes will cause the need to retrain many employees, it will also reduce the need for older people to work. Many people will be forced to retire early. In 1900 about 68% of the men age 65 were working; today less than 25% of the men age 65 are working. These people need to stay involved and be able to adjust to changing times. Education for self-fulfillment is one stimulus to keep the older American active. (Edna McConnell Clark Foundation, 1974)

It has been found that the more educated people are, the more education they want. Researchers such as Cross, 1978; Johnstone and Rivera, 1965; and Peterson, 1979, have found that of adults in organized education "the best single predictor of whether an adult will participate in learning activities is prior level of education attainment. A college graduate is about four times more likely to participate than a high school dropout." (Ramsey, 1980, p. 27) Since the level of education of most Americans has risen it is likely that more people will be interested in learning throughout their lifetime. The value of education has increased in importance.

More women have been and will probably continue to participate in higher education. Between 1974 and 1979 the number of females in college between the ages 25 and 34 rose 58.7%; while those 35 and over increased 66.8%. In 1979 women represented the majority (65.2%) of the students age 35 and over in higher education. (Magarrell, 1981)

One reason for increased female participation has been the "liberalization of attitudes towards women" attending college and following a professional career. (Ramsey, 1980, p. 28) Henderson and Henderson, 1974, felt that many more women seek higher education because they have "become more sought after in the job market." (Bryson, 1981, p. 4) Women now compose 40% of the American

labor force. Currently 45% of married women are working outside of the home. The number of women who are the sole support of their family is also increasing. (McCants, 1981) Many of these women will need to take advantage of the educational opportunity to prepare for better employment and careers.

It is predicted that soon nine out of ten women will be working and probably most will work at least 25 years. Of the females who attended four years of college, 69% are working. (McCants, 1981) Besides the need for better employment, many of the older females are attending because their children are older and women now have the time to complete an education they may have wanted or had started but never were able to finish due to home responsibilities. Centra, 1980, felt that "the trend toward smaller families and higher family incomes has made a college education an attainable reality for many more women in the last decade." (Bryson, 1981, p. 4)

Another factor in the increasing participation of adults in higher education is the consumer movement. Society is demanding the best quality professional service. This means many professionals are now required by their state to keep up-to-date by periodic relicensing or certification. (Peterson, 1979)

Finally, another reason for adult participation is that education provides fulfillment for individual competency needs. (Peterson, 1979) Many people want to take courses to help them adjust to their environment or feel better about their life by becoming better citizens or parents, etc. They are looking for new meaning and satisfaction in life.

Education is fast becoming a major economic factor. (Knowles, 1969) The increase in the number of people involved in education should increase social equity by breaking the cycle of proverty caused by racial, sexual and educational barriers to career advancement. (Peterson, 1979)

Characteristics of the Adult Learner

Cross provided a profile of adult education participants from 1975 National Center for Education Statistics data. It appears that most adult students were between 25-34 years old, at least high school graduates, worked more than 35 hours each week, and had family incomes between $15,000-25,000 annually. The majority were female. Most adults were trying to improve their chances for career advancement by taking job related courses at two or four year colleges. (Cross, 1979) In addition, Cross and Zusman, 1979; and Johnstone and Rivera, 1965, also found that the adult learner was more likely to be white, married and a white collar worker. (Ramsey, 1980)

A few adults may enroll in higher education just for the sake of knowledge; but most have a well-defined goal. (Baker, 1981) Researchers have found that these goals can range from preparing for a new job, advancement in their present jobs, self-fulfillment and personal satisfaction and even to leisure goals. (Ramsey, 1980)

Retention/Attrition

In most of the past research on retention, age was not considered a primary factor or the relationship between age and retention was not clear. (Ramist, 1981)

Sexton, 1965, and Summerskill and Darley, 1955, found that freshmen who were older than average were less likely to graduate. It was assumed that the cause may be due to the same factors that delayed their attendance. (Howell, 1979)

Most studies have found that good college grades are a factor related to persistence. (Ramist, 1981) Dwyer, 1939, examined 24 studies on age and found a pattern that showed grade averages increased from age 21-25. He concluded that maybe as students get older the value of education increases and students are more serious about the purpose of education, which enables them to better

achieve. (Sexton, 1965) Therefore, it seems that if an adult makes good grades he is more likely to persist in college.

Astin, 1976, linked the participation in school activities to persistence. (Kuh and Ardaiolo, 1979) Since the great majority of adults are commuters or work full-time it is unlikely that they participate fully in campus activities. Therefore, it appears that adults could be more prone to dropout when considering this factor.

Astin, 1976, also found a correlation between students working off-campus and attrition. (Kuh and Ardaiolo, 1979) Looking at the profile of adult students it appears that most adults are full-time employees and therefore, this must be considered when discussing persistence and retention. Other studies of traditional student attrition have found that married females, out-of-state students and students enrolled in certain majors are more likely to dropout. (Ramist, 1981)

Many studies have been done on retention and attrition, but there has not been quite as much research on retention/attrition as related specifically to adult students in higher education. Non-traditional or adult students are different, mainly because they are not tied to the role of student as younger students are. They also are participating on a strictly voluntary basis since there is no peer, parent or social pressure towards their attendance. (Darkenwald, 1981)

Verner and Davis, 1964, reviewed the research on adult dropouts. They concluded that the research did not identify sufficiently the extent or nature of any relationship between adult education and attrition. Unrepresented samples in most of the research did not allow for generalizing the conclusions and in most cases the student's own ideas of the situation and reasons for the decision of dropping out were not considered. (Darkenwald, 1981)

Anderson and Darkenwald, 1979; Knox and Videbeck, 1963; and Boshier, 1973

found that sociodemographic variables such as occupation and sex were not strongly related to retention in formal adult education. Anderson and Darkenwald, 1979; Boshier, 1973; Davis, 1961; Dirks, 1955; and Preston, 1958, concluded that age and level of prior education were significant factors. The more formal education one had and the older they were the less likely they would dropout. Anderson and Darkenwald, 1979, noted that at age 60 and over, however, students became more prone to dropout. (Darkenwald, 1981)

Situational factors, which are usually seen as barriers to adults education, such as illness, child care, lack of time, transportation problems, working overtime, etc. appear to be significant to attrition patterns. Although they are important, it is believed that they alone do not cause a student to dropout, but just contribute to the decision. (Darkenwald, 1981)

Looking at program context variables, it appears that there is a significant relationship between the number of weeks a class is scheduled to last and whether or not a student drops out. Anderson and Darkenwald, 1979, found that the greater number of weeks a class was scheduled the less likely an adult would persist. Verner and Davis, 1964, found that if a class met less often then it was more likely the adult students would persist. Also the number of students in a class was related to attrition. Boshier, 1973, discovered that classes with nine or less students had fewer dropouts. (Darkenwald, 1981)

Anderson and Darkenwald, 1979; Boshier, 1973; Irish, 1978; and Verner and Davis, 1964, found that teaching-learning variables such as motivation and expectations were more important than other variables in explaining adult attrition. The largest factor in determining persistence according to Irish, 1978, is the relevance of the course to the needs of the student. Satisfaction with the course is the "best single predictor" of dropout behavior, but even it only explains a small part of the behavior. (Darkenwald, 1981, p. 8)

In summary, the higher the level of prior education an adult has the more likely he will participate in higher education and persist. A shorter course length and meeting fewer times a week also tends to increase persistence of adults. And finally, maybe most important of all, is the quality of the course and its relevance must meet with student's satisfaction in order for the adult student to remain enrolled.

## PLAN OF STUDY

The focus in this study was the five-year undergraduate enrollment trends of non-traditional students at WVU. Non-traditional, for this study, is defined as any student 25 years of age or older.

Since WVU currently offers over 100 degree programs at the graduate and/or professional level, students in these programs over the age 25 would not be considered unusual or non-traditional. It was therefore, decided to concentrate on only the non-traditional undergraduate students as an increase in their number may have more of an impact on WVU services and policies in the future.

Undergraduate ranks range from freshmen to senior. Also included is a special unclassified rank for students not interested in following a degree program at this time.

Data about these students were obtained from Admissions and Records census files. Five-year enrollment trends of non-traditional undergraduates in this study were examined in relation to the following characteristics: age group, sex, rank, part-/full-time status, resident/non-resident status, marital status, major/college of enrollment.

A retention study was also conducted on these non-traditional students. All non-traditional undergraduates enrolled each fall from 1977-1980 were matched by social security number into each successive fall semester. The

percentages of students who were still at WVU after one year, two, three and four years were obtained for all non-traditional students by rank for the fall 1977 thru 1980 semesters. Each cohort of non-traditional students by rank for each of the four years was then matched into the available graduation files to obtain the percentage over the last few years of non-traditional students graduating in four and/or five years.

## TRENDS

During the five-year period from 1977 to 1981 WVU undergraduate enrollment remained relatively stable varying by only 72 students. Undergraduate enrollment consistently represented 68-70% of the total WVU enrollment for the years 1977 thru 1981. Therefore, if undergraduates age 25 and over were to increase substantially it could have a great impact on the institution.

In spite of the relatively stable undergraduate enrollment, undergraduates age 25 and older increased over 23.8% and those 35 and over increased 45.0%; while the number of students under age 25 declined 2.2% from 1977 to 1981. As such, it appears that non-traditional age student enrollment is on the rise at WVU. (Table 1)

TABLE 1
WVU UNDERGRADUATE FIVE YEAR ENROLLMENT TRENDS

| Age Group | # of Undergraduates 1977 | # of Undergraduates 1981 | % Inc. or Dec. |
|---|---|---|---|
| Under 25 | 13,759 | 13,454 | - 2.22% |
| 25 and over | 981 | 1,214 | +23.75% |
| 35 and over | 120 | 174 | +45.00% |
| TOTAL UNDERGRADUATE ENROLLMENT | 14,740 | 14,668 | - .49% |

Non-traditional undergraduates represented between 6 and 9 percent of the total undergraduate enrollment in the five-year period 1977-1981. (Table 2)

TABLE 2
NON-TRADITIONAL STUDENT PERCENT OF TOTAL WVU
UNDERGRADUATE ENROLLMENT

| | Non-traditional Undergraduates | Total Undergraduates | % of Total Undergraduates |
|---|---|---|---|
| 1977 | 981 | 14,740 | 6.66% |
| 1978 | 1,100 | 14,581 | 7.54% |
| 1979 | 1,137 | 14,479 | 7.85% |
| 1980 | 1,236 | 14,501 | 8.52% |
| 1981 | 1,214 | 14,668 | 8.28% |

The largest number of non-traditional undergraduates has been and still is in the 25-29 age group, followed by the 30-34 year age group. (Table 3) The number of students in the 30-34 year age group increased 66.4% from 1977 to 1981. (GRAPH I)

Overall, the majority of non-traditional undergraduates at WVU in the past five years have been male. Nationally, however, the Census Bureau reported more females of non-traditional age were enrolled in higher education than males. Although not quite equalling the number of males, females at WVU currently represent 47% of the non-traditional undergraduates. (GRAPH II and Table 4) The number of females at WVU in all age groups has been increasing, especially those age 35 and over. In fact, female WVU students comprised an increasing majority of the non-traditional students in the 35-39, 40-49 and 50+ age group in each of the five years studied. (Table 4) This increase in the number of older female students is in line with the national trends. (Magarrell, 1981)

The Bureau of Census notes that the number of students age 25 and over may help make up for the loss of 18-24 year olds; however, they will not completely offset the loss because the non-traditional students are mostly part-time. According to their figures, 72% of the age 25 and older students are enrolled part-time. (Magarrell, 1981) Although WVU does not expect to experience a great

loss in the number of freshmen due to a greater participation rate of West Virginia high school graduates, it is important to look at the enrollment status of these non-traditional students.

Surpisingly, contrary to the national norm, in 1981 the majority (63.3%) of WVU non-traditional students were enrolled full-time. Examining the status of the non-traditional students by age category, it appears that those age 25-29 are mostly (73.6%) full-time; while those age 40 and older are primarily enrolled part-time. Over the past five years students in the age category 30-34 were about 46-53% full-time students. This trend appears to be fairly stable over the past five years. (Table 5) Therefore, at WVU the non-traditional students may have a greater impact on WVU undergraduate enrollment than the norm, since they may be more committed to receiving an education.

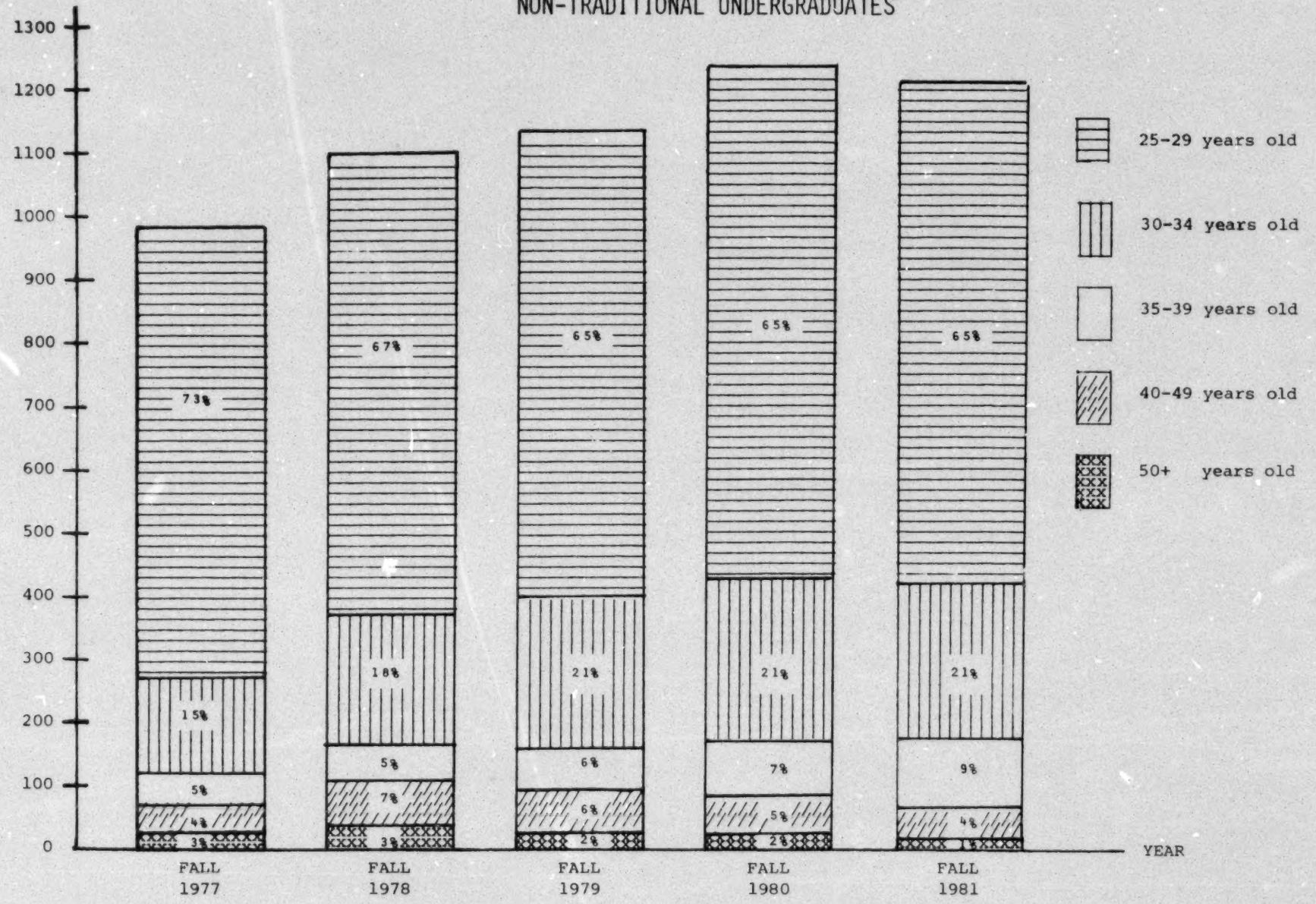
Overall, the majority of full-time, non-traditional WVU undergraduates were males during this five-year period. However, the percent of full-time males did drop from 73% in 1977 to 65% in 1981. The majority of full-time males were in the 25-29 and 30-34 year age groups. (Table 6)

The majority of total part-time, non-traditional WVU undergraduate students were female; this percentage has increased from 53% in 1977 to 68% in 1981. This is probably due to the large increase in the number of older female students. Female students also composed the majority in each age category of part-time, non-traditional students. (Table 7)

Data on marital status could only be compiled from 1977 thru 1980. In 1981, Admissions & Records did not require students to complete the item on their Student Information Form and therefore, the data were not monitored. The majority (51%) of non-traditional undergraduates at WVU were single in 1977. The percentage of single non-traditional undergraduates has been increasing to represent 60% in 1980. This is contrary to other research by Cross and Zusman,

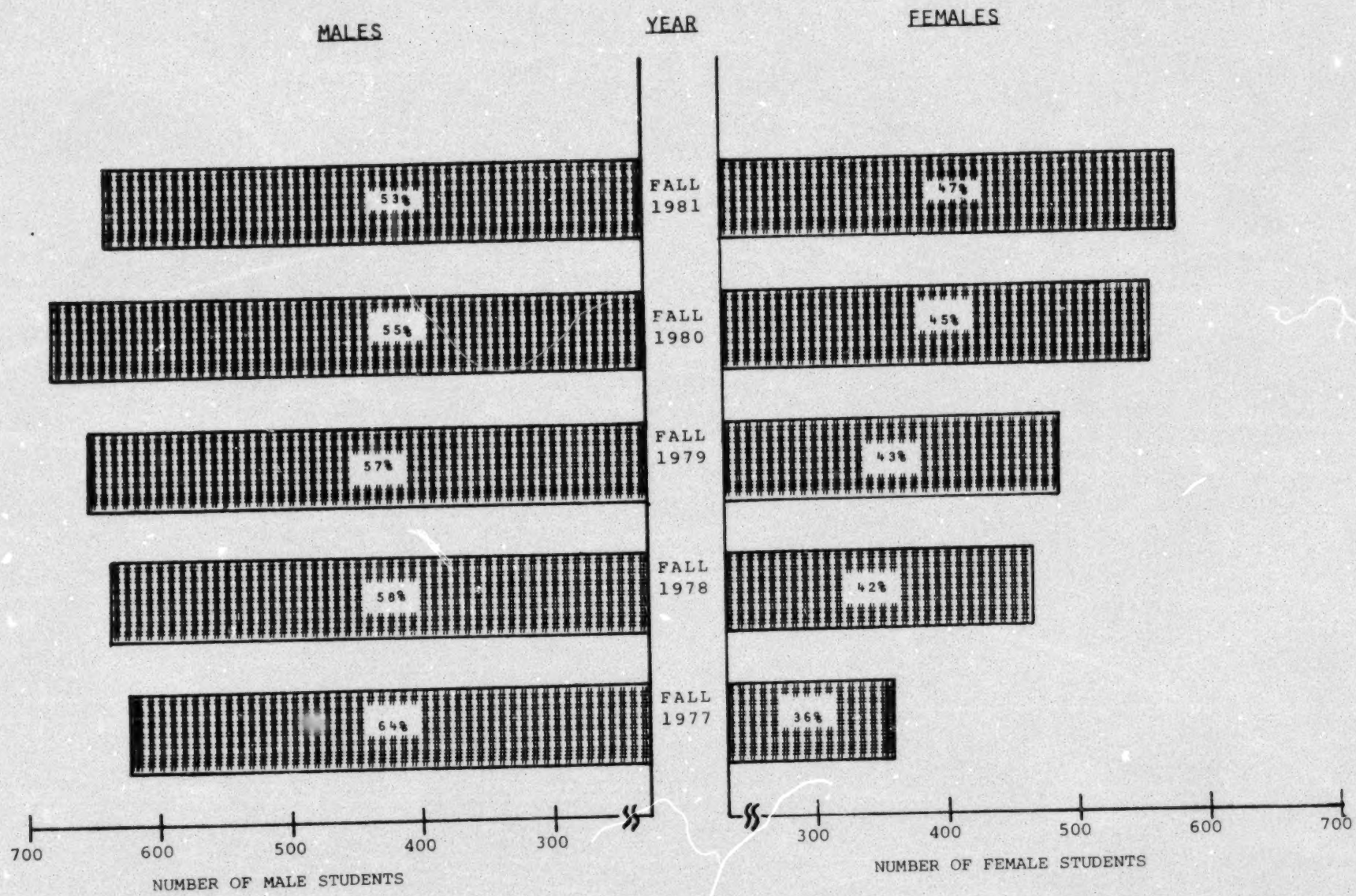
GRAPH I

## NON-TRADITIONAL UNDERGRADUATES



GRAPH II

# NON-TRADITIONAL UNDERGRADUATES BY SEX



1979 and Johnstone and Rivera, 1965 who found most adult students to be married. (Ramsey, 1980) The majority of single students were in the 25-29 age category which happens to be the largest category of non-traditional students. The majority of students in the other age groups were married. (Table 8)

In the five-year period studied, over 70% of the non-traditional undergraduates were residents of West Virginia. In each age group the majority of students were residents. The percent of in-state non-traditional students appears to be increasing as it was 74% in 1977 and rose to 77% in 1981. (Table 9)

Non-traditional undergraduate students at WVU were enrolled in majors throughout the 14 colleges at WVU. The college with the largest non-traditional enrollment was Arts and Sciences followed by the School of Engineering, the College of Business and Economics and the College of Agriculture and Forestry. (Table 10)

Individual majors with the largest number of non-traditional students were mainly those majors set up for special students. The "special unclassified" major, which is composed of students not headed towards any degree program, comprised 5-12% of the non-traditional students; while the "general studies" majors represented 4-7% over the past five years. Those students in the special "BORBA" or Board of Regents Bachelor of Arts degree program, which is intended mainly for older students by giving some credit for life experience, represented 6-8%. The only non-specialized major that had 50 or more non-traditional undergraduates in each of the five years studied was nursing. Over the past five years nursing students represented 5-8% of all non-traditional undergraduates. These four majors, "special unclassified", "general studies", "BORBA" and "nursing", each had 50 or more non-traditional students during the five year period, but represented only 24-30% of the total non-traditional undergraduates. This means that the majority or over 70% of the non-traditional undergraduates

were enrolled in major degree programs. (Table 11)

By rank, 39-44% of the non-traditional undergraduates were seniors in the five-year period studied, 18-22% were juniors, 14-23% were sophomores and the rest were freshmen or unclassified students. (Table 12) By age category seniors also appeared to dominate in all five years, as the majority 38-46% of those in the 25-29 and the 30-34 age categories were seniors. Unclassified students, freshmen and sophomores represented the largest percentage by rank in the 40-49 and 50+ age categories over the last three or four years. (Table 13)

Summary of Trends

In the five years studied the number of non-traditional undergraduates at WVU increased over 23%; while total undergraduate enrollment remained relatively stable. Although nationally, females represent the majority of adult students, at WVU males still hold the slight majority. The number of older female students at WVU have been increasing rapidly, which is in line with the national trends.

Nationally, about 72% of the non-traditional students are part-time; contrary to those figures at WVU, over the last five years the majority (55-63%) of the non-traditional undergraduate students have been full-time. While the majority of these full-time students are males; the number of females attending full-time has been steadily increasing. The majority of part-time non-traditional WVU undergraduates have been females and their percent composition of part-time students continues to increase.

Contrary to research in the literature which found that adult students were mostly married, at WVU, the majority of non-traditional undergraduates were single and this number appears to be on the increase. Another characteristic of the non-traditional student at WVU is that over 70% were residents of West

Virginia and this trend appears to be increasing.

Finally, although some non-traditional students at WVU are enrolled in undeclared or special majors such as "general studies", or the "Board of Regents bachelors program", the majority, or over 70% are enrolled throughout the 14 colleges/schools at WVU in degree program majors.

## RETENTION STUDY

WVU does not have an automatic longitudinal tracking system that could be used in conducting a retention study. This study was conducted using Statistical Analysis System (SAS) programs which accessed data from five different Admissions and Records' census files containing the student records information of all students enrolled during a given fall semester as of the tenth day after the first day of classes.

All undergraduates age 25 and over were selected and matched by social security number into each successive fall file to obtain a retention rate over time. Although originally these undergraduates were divided into age categories it was decided that the numbers were too small in the older age groups for any proper analysis. Students were, however, separated by rank so that four cohorts of students were available to follow from 1977 through 1981. Students in the unclassified rank were not examined because, by definition, they are transient students.

The following tables show in full year intervals the retention rates by rank from the semester the cohort was tracked.

RETENTION RATES

| Entry Semester | Non-Traditional Freshmen | Retention After One Year | Retention After Two Years | Retention After Three Years | Retention After Four Years |
|---|---|---|---|---|---|
| Fall 1977 | 139 | 51.80% | 33.81% | 28.06% | 13.67% |
| Fall 1978 | 177 | 46.89% | 34.46% | 27.68% | |
| Fall 1979 | 169 | 54.44% | 39.64% | | |
| Fall 1980 | 170 | 55.88% | | | |

| Semester Tracked | Non-Traditional Sophomores | Retention After One Year | Retention After Two Years | Retention After Three Years | Retention After Four Years |
|---|---|---|---|---|---|
| Fall 1977 | 146 | 62.33% | 41.10% | 21.92% | 13.70% |
| Fall 1978 | 154 | 62.99% | 44.16% | 25.32% | |
| Fall 1979 | 178 | 65.73% | 42.13% | | |
| Fall 1980 | 178 | 60.11% | | | |

| Semester Tracked | Non-Traditional Juniors | Retention After One Year | Retention After Two Years | Retention After Three Years | Retention After Four Years |
|---|---|---|---|---|---|
| Fall 1977 | 202 | 66.83% | 30.20% | 18.32% | 7.92% |
| Fall 1978 | 221 | 62.90% | 34.39% | 15.84% | |
| Fall 1979 | 204 | 63.73% | 34.31% | | |
| Fall 1980 | 253 | 64.82% | | | |

| Semester Tracked | Non-Traditional Seniors | Retention After One Year | Retention After Two Years | Retention After Three Years | Retention After Four Years |
|---|---|---|---|---|---|
| Fall 1977 | 435 | 43.22% | 25.52% | 16.55% | 11.95% |
| Fall 1978 | 456 | 40.57% | 24.78% | 14.69% | |
| Fall 1979 | 461 | 40.56% | 17.79% | | |
| Fall 1980 | 481 | 35.76% | | | |

As can be seen, of the 139 non-traditional freshmen enrolled fall 1977 only 51.80% were still here in 1978; 33.81% were enrolled in fall 1979; 28.06% were enrolled fall 1980 and only 13.67% were enrolled in 1981. Looking at the freshmen retention rate after one year it appears that WVU is consistently retaining only a little more than half of the students age 25 or older. It does appear however, that the percentage retained after one year and two years may be increasing as of the 1980 freshmen, 55.88% were retained after one year and 39.64% after two years as compared to only 51.80% retained after one year

and 33.81% after two years of the 1977 freshmen.

As mentioned earlier, there is not any structured longitudinal system of following up students to determine whether or not they are dropping out or stopping out. As such, a retention study of the total undergraduate population has never been completed. Therefore, there is no way to compare the retention rates of non-traditional undergraduate to the traditional aged undergraduates. (A retention study of all undergraduates is planned in the future.) Data on retention rates limited to non-traditional undergraduates at universities or colleges were not found in the literature; therefore, we can only compare our rates to the national figures which are for undergraduates in general, not just those age 25 or older.

Most researchers agree that the majority of attrition occurs in the first two years of college. (Cope, 1968) Researchers at the National Center for Educational Statistics (NCES) conducted a longitudinal study in which they found 24% of the freshmen withdrew within two years. (National Center for Educational Statistics, 1977). The attrition rate of WVU non-traditional aged freshmen after two years is over 60% which is more than double the national rates found by NCES. Although this sounds extremely high, the number of non-traditional aged students involved in this study is very low compared to the number of students in the NCES study which tends to inflate the percentages.

From examination of the WVU retention rate tables for sophomores and juniors (p. 18) it appears that the retention rate is higher the longer a student stays. The WVU non-traditional sophomore retention rate after one year has been around 62%; while for juniors the retention rate after one year was around 65%. This is in line with retention research which found that the more institutional and goal commitment exhibited the more likely the student was to persist. (Tinto, 1975)

The retention rate for seniors after one year was around 40%. This seems to be high considering the fact that they are seniors and many would probably be graduating. If the majority of the non-traditional students were part-time this would help explain why so many seniors are returning; however, the majority are full-time. There also is an unusually high number of seniors each year compared to the other ranks. One possible explanation could be that students returning to obtain a second bachelor's are assigned the rank of senior until they complete enough credits to graduate. A second possibility is that students who graduated from WVU with a bachelor's degree and return to attend graduate school are not getting their rank changed and are therefore, still appearing as undergraduates.

As mentioned earlier retention rates by age group were not examined due to the small numbers of students in the older age groups. However, one age group, 25-29, which contained the largest number of students was examined. Retention rates after one and two years were similar to those found for all students age 25 and over that were sophomores, juniors and seniors; but the freshmen in the 25-29 year old category had slightly higher retention rates than total freshmen age 25 or over. (Table 14)

To briefly get an idea of whether or not the students are just stopping out and not dropping out for good we looked at the four ranks of undergraduates enrolled fall 1977 and matched them into the next four fall semesters. This time, however, if a student did not appear in the next year he was dropped from our records, and if he appeared again the following year he was not counted. Therefore, only students who consectively attended were included. These persistence rates were matched with the earlier retention rates which were calculated based on all students who were in the original file regardless of whether or not they were regular attenders.

As shown in Graph III there is not too much difference in the rates. This indicates that there probably are very few students who leave and come back in two or three years. It appears that once the students are lost they are lost for good. They have either accomplished their goal or are so dissatisfied they don't return.

The student record files used to determine retention rates do not contain any indication of when or whether or not a student graduated. In order to examine graduation data for these non-traditional students, each fall file was matched into the four graduation files. The 1977 graduation file was not available, therefore, we could only look at students enrolled in 1978 thru 1980. In the following table the rates of graduation in what we assume to be at least four years are shown.

GRADUATION RATES

| | Total % Graduated by 1981 |
|---|---|
| 1978 Freshmen | 15.82% |

| | Total % Graduated by 1980 | Total % Graduated by 1981 |
|---|---|---|
| 1978 Sophomores | 37.66% | 50.65% |

| | Total % Graduated by 1981 |
|---|---|
| 1979 Sophomores | 37.64% |

GRADUATION RATES (Continued)

| | Total % Graduated by 1979 | Total % Graduated by 1980 | Total % Graduated by 1981 |
|---|---|---|---|
| 1978 Juniors | 42.08% | 61.09% | 66.97% |

| | Total % Graduated by 1980 | Total % Graduated by 1981 |
|---|---|---|
| 1979 Juniors | 42.65% | 62.75% |

| | Total % Graduated by 1981 |
|---|---|
| 1980 Juniors | 40.71% |

---

| | Total % Graduated by 1978 | Total % Graduated by 1979 | Total % Graduated by 1980 | Total % Graduated by 1981 |
|---|---|---|---|---|
| 1978 Seniors | 44.74% | 65.35% | 76.10% | 80.70% |

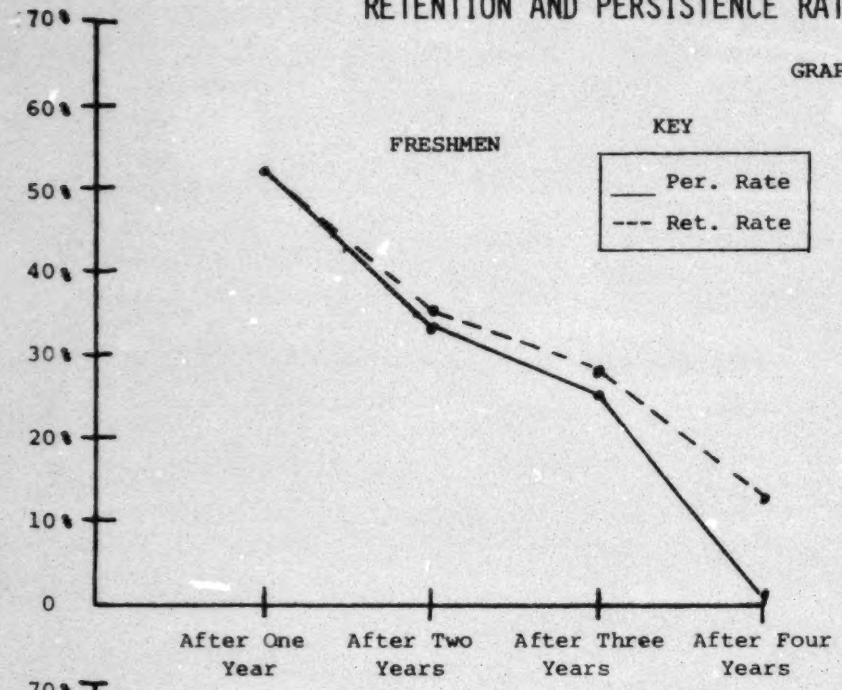
| | Total % Graduated by 1979 | Total % Graduated by 1980 | Total % Graduated by 1981 |
|---|---|---|---|
| 1979 Seniors | 39.05% | 62.91% | 72.23% |

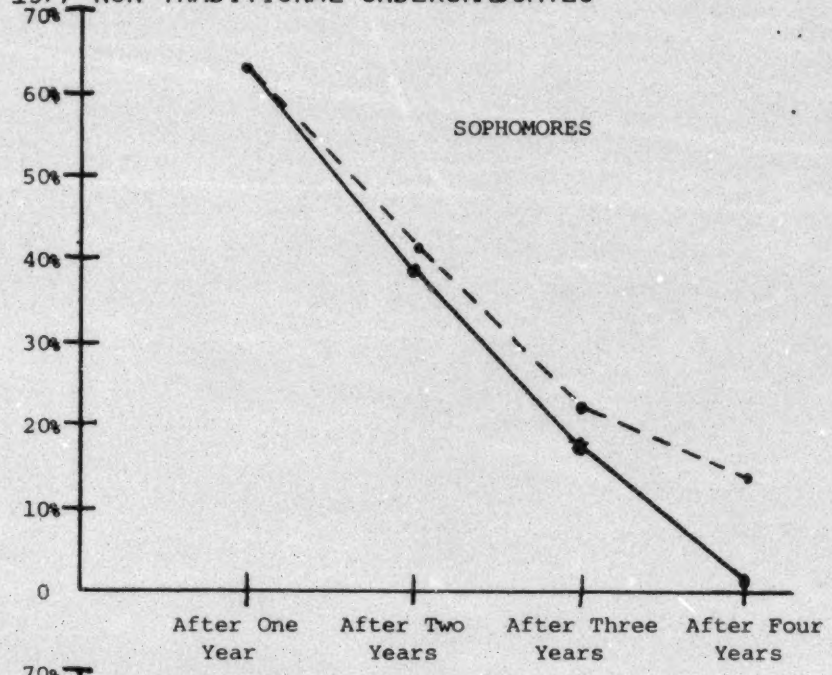
| | Total % Graduated by 1980 | Total % Graduated by 1981 |
|---|---|---|
| 1980 Seniors | 42.62% | 65.07% |

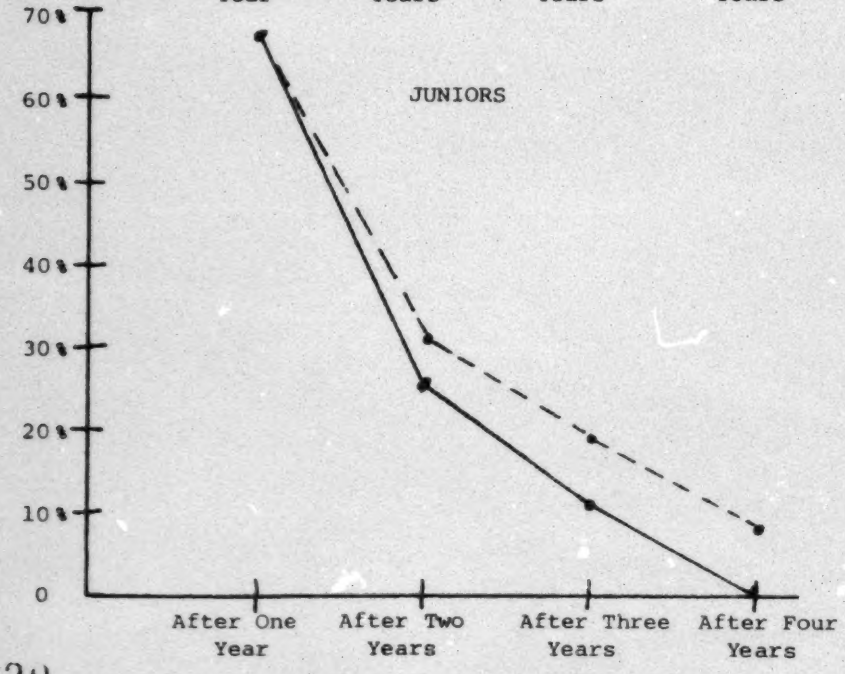
By 1981 (within four years) about 16% of the freshmen in 1978 had graduated. Of the 1978 sophomores, 38% had graduated by 1980, which we assume to be four years if their sophomore year was their second year. The 1979 sophomore cohort also had 38% graduate who graduated in 1981 or two years later. As in

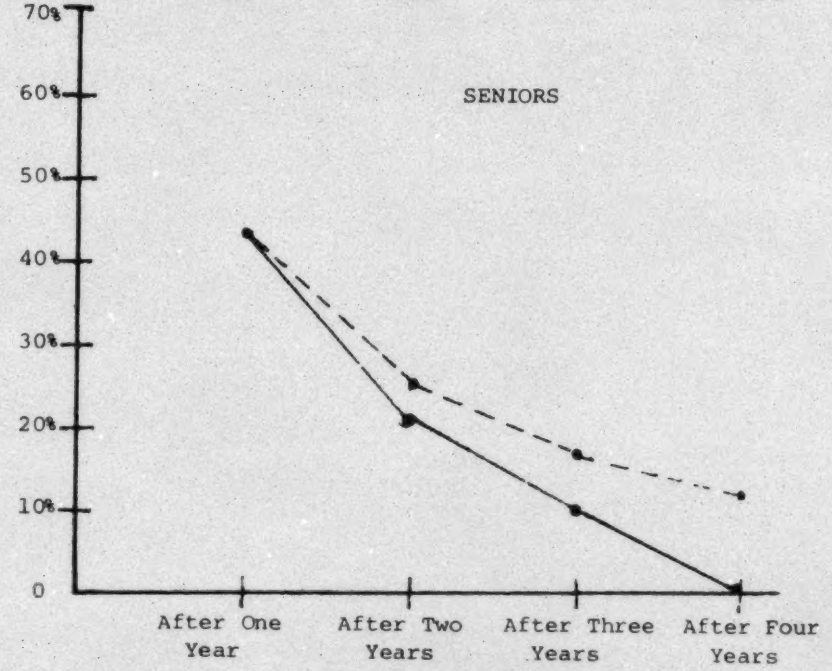
# RETENTION AND PERSISTENCE RATES OF 1977 NON-TRADITIONAL UNDERGRADUATES

GRAPH III



the retention rates it appears that the more a student is committed to an institution or the longer he's been here the more likely he will continue on to graduate. Looking at the juniors about 42% of the 1978 juniors graduated in 1979 or what appeared to be four years; while 43% of the 1979 juniors and 41% of the 1980 juniors graduated in 1980 and 1981 respectively or probably four years after entering.

Once again the senior rank students look a little strange as only 45%, 39% and 43% of the 1978, 1979 and 1980 seniors respectively graduated that year. This percentage is not as high as expected, which probably leads to the conclusion that many non-traditional students remain at the senior rank for longer than one year. A much higher percentage (63-65%) of the seniors graduated two years later or what may be within five years.

Summary of Retention Study

In the past four years WVU had been consistently retaining a little more than half of their non-traditional aged freshmen after one year. However, two years later the retention rate falls to around 35% for freshmen. It appears that the attrition rate of non-traditional freshmen is double the national rate of all undergraduates after two years.

The retention rates for sophomores and juniors are much higher after one year than the freshmen rate. This is probably because they are more committed to a goal since they have already been attending two or three years and are therefore, more likely to persist.

There was not much difference found between the persistence rates and retention rates; indicating that very few dropouts are returning within the next few years. Non-traditional students who dropped either only wanted a few classes or were so dissatisfied they never came back.

Although the graduation percentages of freshmen look low, as only 16% of

1978 freshmen graduated in four years; the rates increase as a students' rank increases. Therefore, a higher percentage of sophomores and juniors graduated in about four years. The graduation rate of students in the senior rank, which was the rank with the largest number of non-traditional students, was 63-65% who graduated two years later or what was probably five years since their entry. Just the fact that so many non-traditional students are obtaining degrees shows that many are committed to the institution and to obtaining an education, not just taking one or two classes for enjoyment or leisure.

## CONCLUSION/RECOMMENDATIONS

In conclusion, the enrollment trends of the non-traditional undergraduate students at WVU in some ways follows the national trends and differs in other ways. It is very evident that WVU needs to continue to monitor the trends as the number of adults participating continues to increase. Since the majority of non-traditional students at WVU are full-time and enrolled in major degree programs they are bound to have more of an impact on undergraduate enrollment than if they were part-time students taking special interest classes only and paying only partial tuition fees. At some point in the future it is recommended that a needs assessment of all students age 25 or over be conducted.

Although the retention of non-traditional students at WVU is low these rates increase as a student increases in rank therefore, it is important that adult students be advised early concerning courses relevant to their needs as that is the most important factor relating to adult retention. It is recommended that a retention study be conducted on all undergraduates in order to see if there is a difference between the adult retention and the traditional undergraduate retention.

Finally, this study may have uncovered a ranking problem that needs

examined. The high numbers of seniors and their continued retention leads one to suspect that either many students are second degree students arbitrarily assigned the senior rank or some are graduate students that did not get their rank changed. In any case, there seems to be something strange going on at the senior level that needs looked into.

## REFERENCES


ANDERSON, R. E., & DARKENWALD, G. G. The adult part-time learner in colleges and universities: A clientele anlaysis. Research in Higher Education, 1979, 10 (4), 357-370.

BAKER, J. (Ed). Adult learners in universities. Toronto: Council of Ontario Universities, Office of Teaching and Learning, June 1981. ED 210-994.

BRYSON, C. H. Selected student demographic characteristics, 1974-1980. Paper presented at the Southern Conference for Institutional Research, North Carolina, 1981.

COPE, R. G. Limitations of attrition rates and causes given for dropping out of college. Journal of College Students Personnel, 1968, 9 (6), 386-392.

CROSS, K. P. Adult learners: Characteristics, needs, and interests. In R. E. Peterson and Associates, Lifelong Learning in America. San Francisco: Josey-Bass, 1979, 75-141.

DARKENWALD, G. G. Retaining adult students. ERIC Clearninghouse on Adult Career and Vocational Education, 1981, ED 205-773.

EDNA MCCONNELL CLARK FOUNDATION. Never too old to learn. New York: Academy for Educational Development, 1974.

HOWELL, L. P. et al. Characteristics of student persisters and non-persisters at Old Dominion University. ERIC, 1979, ED 180-366.

KNOWLES, M. S. Higher adult education in the United States: The current picture, trends and issues. Washington, D. C.: American Council on Education, 1969.

KUH, G. D., & ARDAIOLO, F. P. Adult learners and traditional age freshmen: Comparing the "new" pool with the "old" pool of students. Research in Higher Education, 1979, 10 (3), 207-219.

MAGARRELL, J. The enrollment boom among older Americans: 1 in 3 college students is now over 25 years old. The Chronicle of Higher Education, 1981, 22 (11), 3.

MAGARRELL, J. The enrollment roller coaster: Colleges fear the big dip. The Chronicle of Higher Education, 1978, 18 (1) 1.

MCCANTS, L. S. 1984 Anticipated. Lifelong Learning - The Adult Years, 1981, 4 (7), 10-11.

NATIONAL CENTER FOR EDUCATION STATISTICS. Withdrawals from institutions of higher education - An appraisal with longitudinal data involving diverse institutions. Washington: U.S. Government Printing Office, 1977.

PETERSON, R. E. Implications and consequences for the future. In R. E. Peterson and Associates, Lifelong Learning in America. San Franscisco: Jossey-Bass, 1979, 422-453.

RAMIST, L. College student attrition and retention. Finding - ETS, 1981, 6 (2), 1-3.

RAMSEY, N. V. Campus based adult students and institutional response. Dissertation, West Virginia University, Morgantown, WV, 1980.

RAWLINS, M., & DAVIES, K. Today's challenge: Adults in college. Lifelong Learning - The Adult Years, 1981, 4 (9), 12-13.

SEXTON, V. S. Factors contributing to attrition in college population: Twenty-five years of research. The Journal of General Psychology, 1965, 72, 301-326.

TINTO, V. Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research, 1975, 45 (1) 89-125.